THIS DOCUMENTS IS REQUIRED READING FOR ANY PERSONNEL PERFORMING WORK IN NSC LABORATORIES

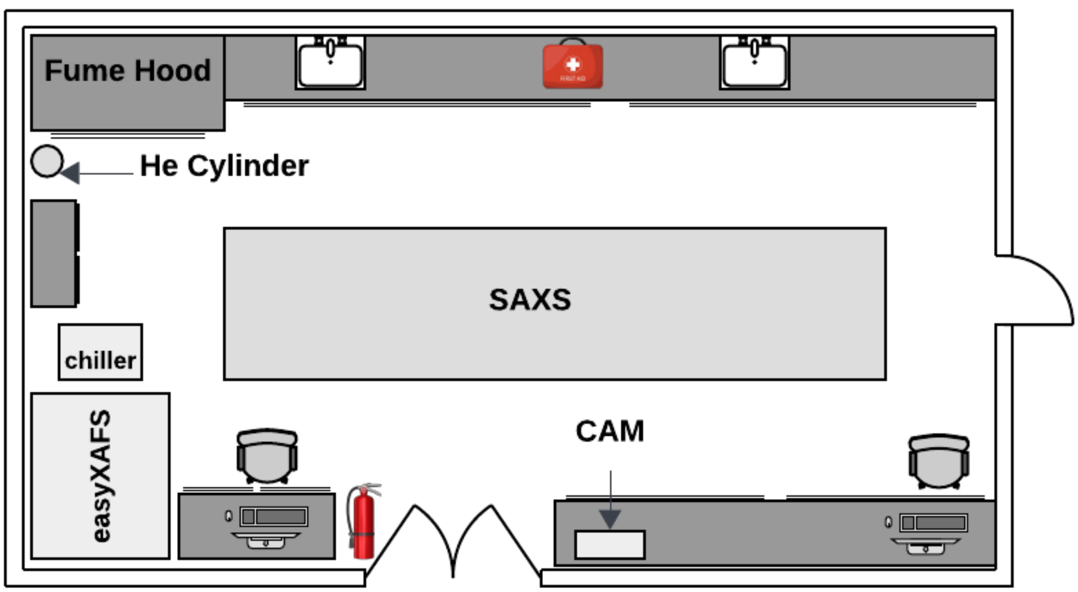
Laboratory Standards

Dodgen Laboratory Room 114
NUCLEAR SCIENCE CENTER
Rev. 1, 4/2025

Washington State University
Dodgen Research Facility

1 LABORATORY LAYOUT

The DRF-114 laboratory (114) houses the easyXAFS and small angle X-ray scattering (SAXS) X-ray equipment. The lab is used for the non-destructive analytical technique which provides detailed information about the oxidation state, structural makeup, particle size, and periodicity of thin films. The machines produce X-rays and is to only be operated by personnel with training in radiation producing machines. In addition to the X-ray instrumentation, the lab offers researchers plenty of bench space and one fume hoods. All lab work shall be performed on lab paper on a lab tray. Lab users are to frisk out before leaving the lab.



Dodgen Research Facility - 114

2 GENERAL RULES

2.1 Utilize best laboratory practices at all times.

2.2 Frisk out of the lab prior to exiting DRF-114.

2.3 When working with radioactive material, follow the guidelines and regulations contained in the WSU Radiation Protection plan and the Nuclear Radiation Center Radiation Protection Plan.

2.4 Lab benchtop space is considered at a premium, all work with radioactive material shall be done on a lab tray covered in lab paper. Clean up and survey immediately after you are done with the workspace.

2.5 A lab safety binder is maintained in the lab. Refer to it for chemical hygiene and emergency preparedness.

2.6 A quarterly lab check / cleaning is performed by a licensee or appropriately trained person until a PI takes over the lab space. See the section titled “Lab Checks” for procedures that are performed.

3 LAB CHECKS

NSC staff will perform the following checks and laboratory duties on a regular basis.
<u>This list is to be performed in the order below.</u>

3.1 **WEEKLY:** Check safety shower and eye wash stations for proper operation. Fill out the safety check form.

3.2 Check all benchtops for cleanliness and debris. Make sure they are clean.

3.3 Wipe down cabinets and all painted hood surfaces with a damp towel.

3.4 Check that all radioactive material is stored appropriately, and that radioactive trash is disposed of and not overflowing. Box and replace rad trash boxes during this time as needed.

3.5 Swiffer the entire lab.

4 CERTIFICATE OF EMPLOYEE TRAINING

Name and title of person providing laboratory safety training:

The following employees have received laboratory safety training and reviewed the chemical hygiene plan for this laboratory.

- Names and training dates of users trained on each of the X-ray instrumentation can be found in the Training Documentation binders found at the easyXAFS and SAXS.
  A list of trained users approved for the analysis of radioactive materials is available at each X-ray instrument.